

## PROBLEME REZOLVATE

### 1. STIVA

```
#include<iostream>
#define DIM 1001
using namespace std;
int S[DIM],k,n;

int main()
{
    int i,x;
    cout<<"n=";cin>>n;
    //initializarea stivei vide
    k=0;
    for(i=1;i<=n;i++)
    {
        cout<<"x=";cin>>x;
        //adaugam x in stiva, PUSH(x)
        if(k==DIM) cout<<"Eroare: Stiva plina!";
        else
        {
            k=k+1;
            S[k]=x;
        }
    }
    //afisarea stivei
    while(k>0)//cat timp stiva nu este vida
    { //extragem elementul din stiva, POP
        x=S[k];
        k=k-1;
        cout<<x<<' ';
    }
    cout<<'\n';
    cout<<"k="<<k;
    return 0;
}
```

### 2. COADA

```
#include<iostream>
#define DIM 1001
using namespace std;
int C[DIM],pi,ps;

int main()
{
    int i,x,n;
    cout<<"n=";cin>>n;
    //initializam coada vida
    pi=1; ps=0;

    for(i=1;i<=n;i++)
    {
        cout<<"x=";cin>>x;
        //adaugam x in coada
        if(ps==DIM) cout<<"Eroare: Coada plina!";
        else
        { //incrementam indicele ps si adaugam x in coada
            ps=ps+1;
        }
    }
}
```

```

        C[ps]=x;
    }
}
//afisarea cozii
while(pi<=ps)//cat timp coada nu este vida*
{//extragem elementul de la inceputul cozii
    x=C[pi];
    pi=pi+1;
    cout<<x<<' ';
}
cout<<'\n';
cout<<"pi="<<pi<<"    ps="<<ps;
return 0;
}

```